

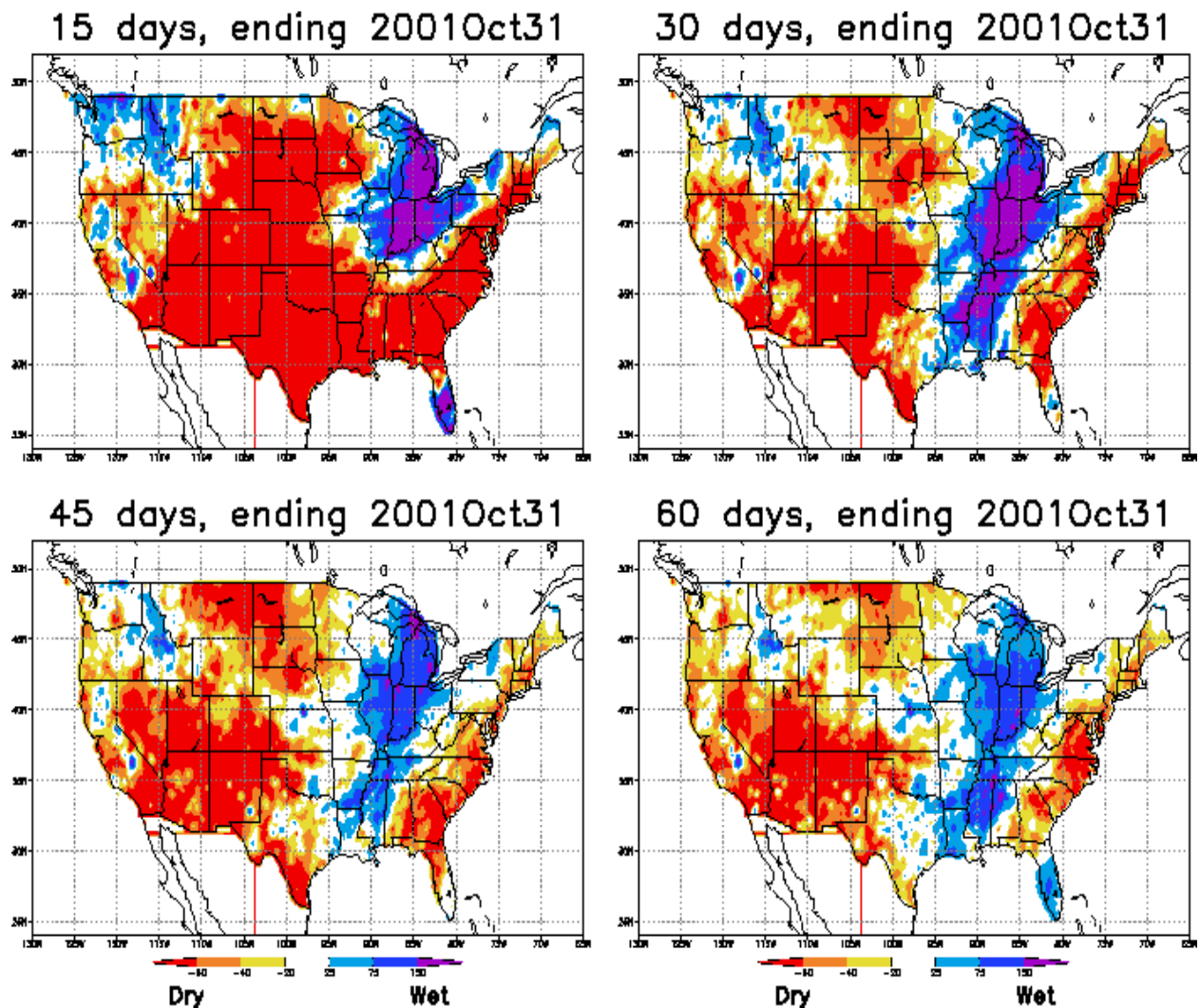
**01 November 2001**  
**Drought and Reservoir Status—Wilmington District**

1. **Purpose of this report:** This is a status report on drought and reservoir conditions in the Wilmington District, U.S. Army Corps of Engineers. Specifically, this report will present past and current watershed rainfall and reservoir inflows in both tabular and graphical formats and discuss the current status and future operation of the five reservoir projects operated by the Wilmington District. The Corps projects are: John H. Kerr Dam and Reservoir project located on the Roanoke River, North Carolina and Virginia; Philpott Lake project located on the Smith River in the Roanoke River Basin, Virginia; B. Everett Jordan Dam and Lake project located on the Haw River in the Cape Fear River Basin, North Carolina; W. Kerr Scott Dam and Reservoir project located on the Yadkin River in the Yadkin-Pee Dee River Basin, North Carolina; and Falls Lake project located on the Neuse River in the Neuse River Basin, North Carolina. In general, the Philpott and John H. Kerr projects are in a significant drought status and the W. Kerr Scott, Falls and B. Everett Jordan projects are in a moderate drought. A summary table for these projects is found below.

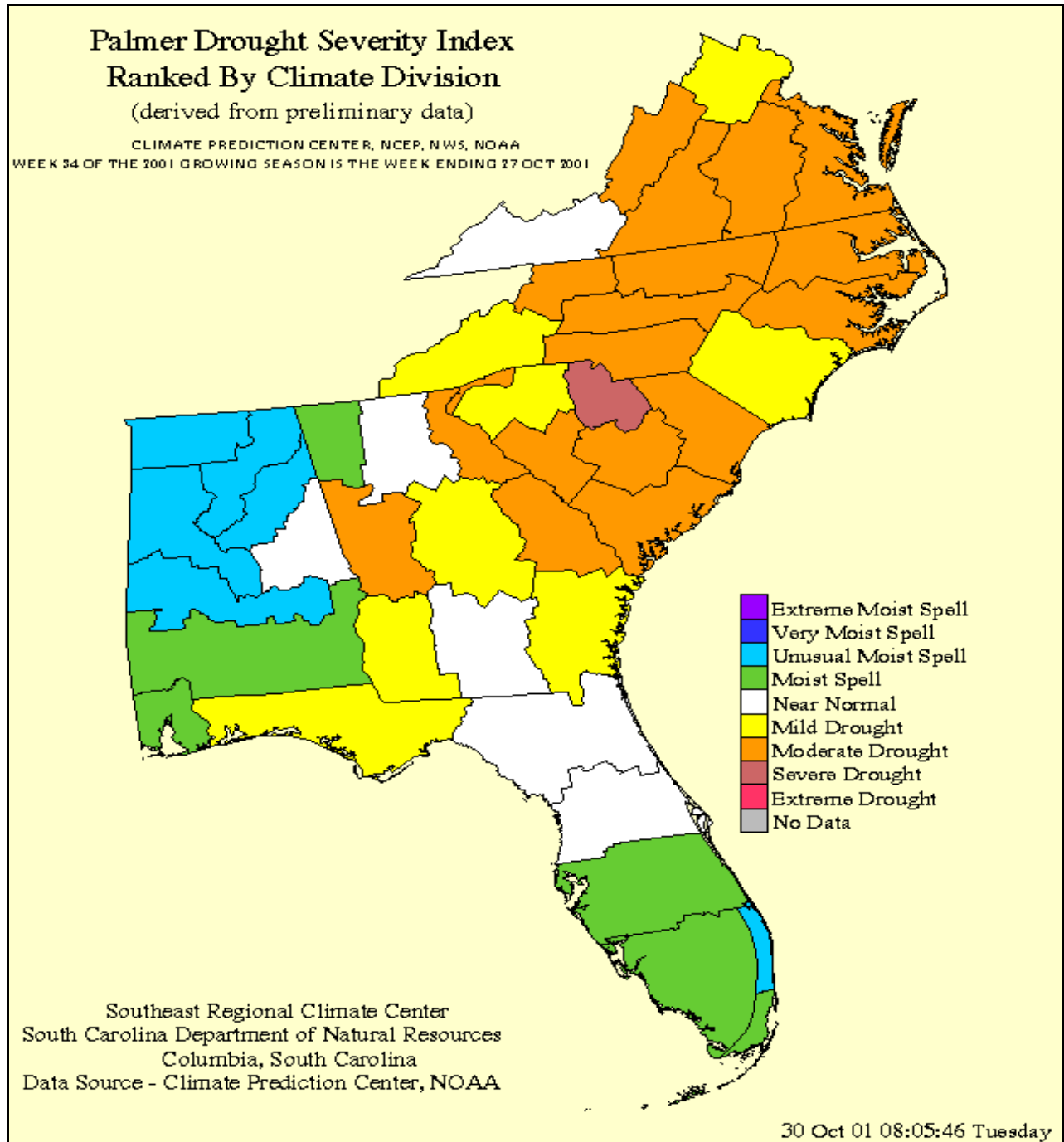
**Table One—Wilmington District Reservoir Project Status**

<b>Reservoir</b>	<b>Current Level (feet-msl)</b>	<b>Guide Curve Level (feet-msl)</b>	<b>Trend or Status</b>
John H. Kerr	292.16	297.5	Kerr Reservoir is 5.3 feet below guide curve, is now below the dependable capacity level of 293 and continues a slow fall. Heavy impacts occur to recreation at this level and hydropower plant capacity is impacted.
Philpott	965.22	971.5	Philpott Lake is 6.3 feet below the guide curve and falling slowly. Recreational impacts will increase as the level falls.
B. Everett Jordan	213.77	216.0	Jordan Lake is 2.2 feet below guide curve and is falling slowly.
Falls Lake	249.03	251.5	Falls Lake is 2.5 feet below guide curve and is falling slowly.
W. Kerr Scott	1027.19	1030.0	W. Kerr Scott Lake is 2.8 feet below guide curve and falling slowly.

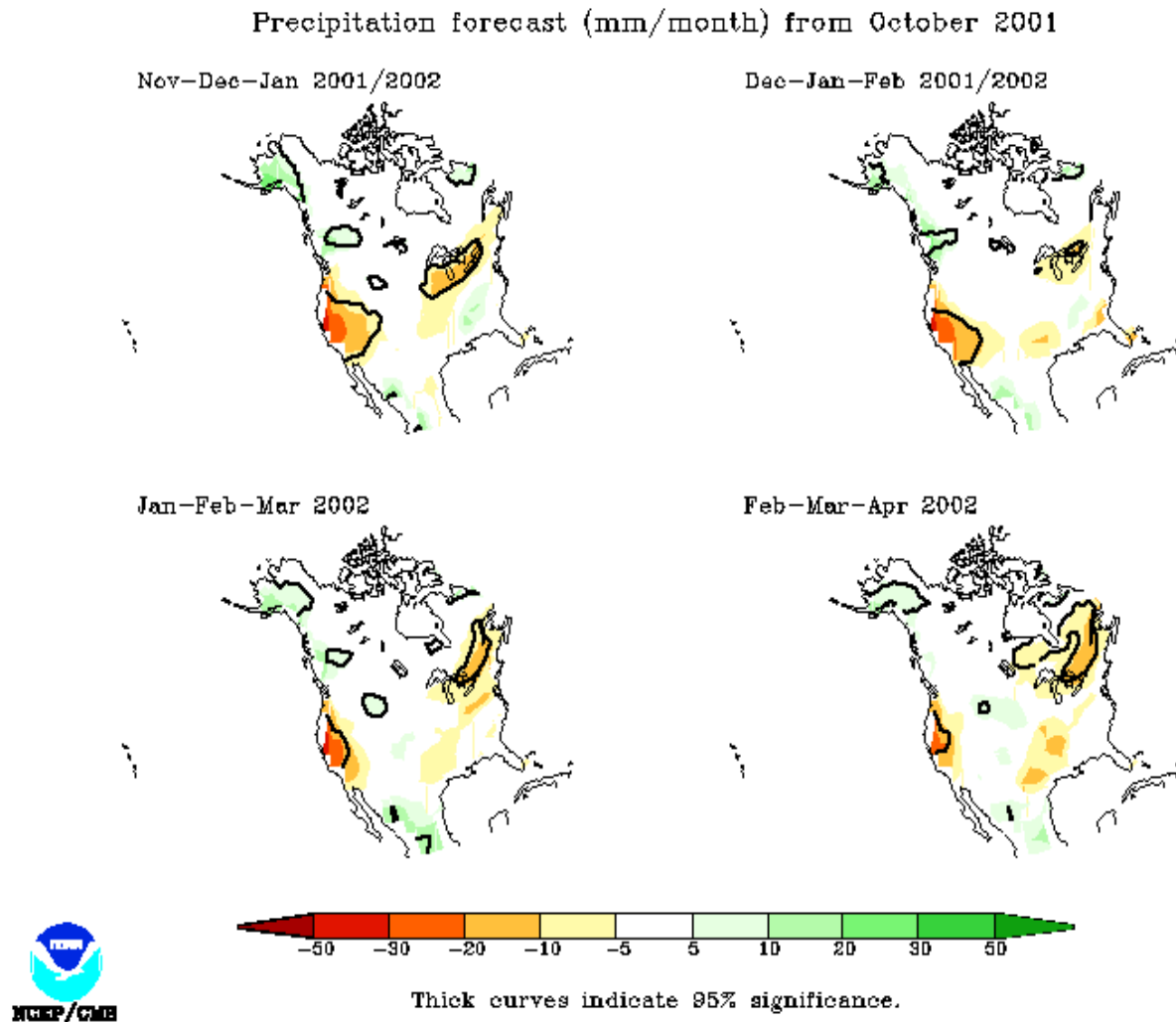
2. **Rainfall Status:** The four panel plot on the following page shows the total rainfall observed in 15 day intervals for the entire United States with data through 30 October 2001. The four panels generally illustrate that both North Carolina and Virginia have received below average rainfall over this 60-day period. The extreme dry conditions the five reservoir projects within the Wilmington District have experienced for the last 15 days are extended over the majority of the country. Reservoir inflow and rainfall information presented later in this report will demonstrate that an extended time of above average rainfall over several months is needed to reverse the drought conditions, replenish the water tables and restore the stream flow and reservoir levels.



3. **Palmer Drought Index:** The Palmer Drought severity index is illustrated further below and shows the majority of Virginia and North Carolina to be in a mild to moderate drought.



4. **Forecast Precipitation:** The latest long term rainfall forecast from the Climate Modeling Branch of the National Oceanic and Atmospheric Administration (NOAA) is shown below. In general, near normal rainfall conditions are expected over the next few months for the North Carolina and Virginia areas. This official forecast is used to estimate future inflows and projected lake levels shown later in this report.



5. **River and Stream Flow Conditions:** The points on the map shown below are the locations of stream gages maintained by the U.S. Geological Survey. The meaning of the individual points is shown in the legend located to the left of the map. If a location does not have a color associated with it, then the station's status is unranked. As shown on the map, river and stream flow conditions can vary abruptly from location to location and illustrate the orographic effects of the Appalachian mountain chain. The stream gage locations west of the Appalachian mountain chain are shown predominately as 25<sup>th</sup> to 89<sup>th</sup> percentile gages. Stream gages showing flows less than the 24<sup>th</sup> percentile are typically shown on the eastern side of the Appalachian Mountains. This demonstrates that the higher mountains can strip the moisture from rain clouds as they travel from west to east. Specifically, the Smith River watershed upstream of Philpott Dam in south-western Virginia and the Roanoke River watershed above Kerr Dam in south central Virginia has incoming streams that are in the 24<sup>th</sup> flow percentile and lower. Numerous record lows are reported for the water shed areas above Kerr and Philpott. The W. Kerr Scott area displays below normal stream flow conditions (predominately 24<sup>th</sup> percentile and lower). The Haw River watershed above B. Everett Jordan Dam and the Neuse River watershed above Falls Dam are in borderline areas (25<sup>th</sup> to 74<sup>th</sup> percentile flows). A table of rainfall and reservoir inflows to Wilmington District dams over the past 41 months is included later in this report.

